

IN THE CLAIMS

1. (Currently amended) A light guide plate structure comprising:
a light guide plate, comprising at least one light incident surface, a light scattering surface and a light emitting surface, wherein the light incident surface is on a sidewall of the light guide plate, the light scattering surface is on a bottom surface of the light guide plate, the light emitting surface is on a top surface of the light guide plate, wherein the light scattering surface has a plurality of notches; and
a plurality of transparent element structures having first and second surfaces associated with, disposed within the plurality of notches so that the first surfaces are within the plurality of notches and the second surfaces are outside the plurality of notches, wherein a refractive ~~reflective~~ index of the plurality of transparent element structures is different from that of the light guide plate.
2. (Previously presented) The light guide plate structure of claim 1, wherein the plurality of transparent element structures comprises a glass or an acrylic material.
3. (Previously presented) The light guide plate structure of claim 1, wherein the light guide plate is a mesa light guide plate, the plurality of transparent element structures have different sizes, the plurality of transparent element structures are disposed on the light scattering surface at least partially in sequence by size, and bottom surfaces of the plurality of transparent element structures are substantially coplanar.
4. (Currently amended) A back light for a display comprising:
a light guide plate structure, comprising: a light guide plate, comprising at least one light incident surface, a light scattering surface and a light emitting surface, wherein the light incident surface is on a sidewall of the light guide plate, the light scattering surface is on a bottom surface of the light guide plate, the light emitting surface is on a top surface of the light guide plate, and wherein the light scattering surface has a plurality of notches;
a plurality of transparent element structures~~[[,]]~~ disposed within the plurality of notches, wherein a refractive ~~reflective~~ index of the plurality of transparent element structures is different from that of the light guide plate and wherein the plurality of transparent element structures includes at least one surface that is outside of the plurality of notches and outside of the light guide plate structure; and

a linear light source next to the light incident surface of the light guide plate.

5. (Previously presented): The back light of claim 4, wherein the plurality of transparent element structures comprises a glass or an acrylic material.

6. (Previously presented): The back light of claim 4, wherein the light guide plate is a mesa light guide plate, the plurality of transparent element structures have different sizes, the plurality of transparent element structures are disposed on the light scattering surface at least partially in sequence by size, and bottom surfaces of the plurality of transparent element structures are substantially coplanar.

7-20 (Cancelled)

21. (New) The light guide plate structure of claim 1, wherein the first surfaces are adapted to reflect light incident from the light incident surface, and the second surfaces are adapted to reflect light that has transmitted through the first surfaces.

22. (New) The light guide plate structure of claim 1, wherein the first surfaces are above the light scattering surface and the second surfaces are below the light scattering surface.

23. (New) The light guide plate structure of claim 7, further comprising a diffusion sheet and a brightness enhancement film disposed on the light emitting surface to receive light from the first and second surfaces.

24. (New) The back light of claim 4, wherein the at least one surface that is outside of the plurality of notches and outside of the light guide plate structure is reflective.

25. (New) A light guide plate structure comprising:
a light guide plate, comprising a light incident surface, a light scattering surface and a light emitting surface, wherein the light scattering surface is on a bottom surface of the light guide plate, the light emitting surface is on a top surface of the light guide plate, and wherein the light scattering surface includes a plurality of notches;
means for introducing light from a light source into the light guide plate; and

means for reflecting the light from a surface that is outside of the plurality of notches and outside of the light guide plate back into the light guide plate.

26. (New) The light guide plate structure of claim 25, wherein a refractive index of the means for reflecting the light is different from that of the light guide plate.

27. (New) The light guide plate structure of claim 25, wherein the light source is a linear light source.

28. (New) The light guide plate structure of claim 25, wherein the light guide plate is a mesa light guide plate.